REMARKS

The claims in the application are 1-9, 16, 17, 21, 23, 24, 26, 27 and new Claims 28-31 added by the present amendment.

Favorable reconsideration of the application as amended is respectfully requested.

The present amendment is being made in accordance with a telephone interview between the Examiner in charge of the above-identified application at the Patent and Trademark Office and Applicant's representatives on Wednesday, July 29, 2009. The courtesy extended by the Examiner in arranging for and conducting the telephone interview is greatly appreciated.

Independent Claims 1, 3 and 16 have been amended as presented for discussion during the telephone interview and will be addressed further *infra*. A proposed Fig. 9 is enclosed and illustrating a flow chart to address the drawings objection set forth in paragraph 5 of the Office Action, in accordance with discussion during the telephone interview. Proposed Fig. 9 finds clear support throughout the present application, e.g., in the original set of claims as filed which constitute part of the invention disclosure.

Claims 10, 22 and 25 have been canceled without prejudice, eliminating the rejections under 35 U.S.C. §§ 101 and 112, first paragraph raised in paragraphs 6, 8 and 9 of the Office Action. Additionally, the claims have been amended to eliminate the formal rejections under 35 U.S.C. §112, second paragraph raised in paragraph 11 of the Office Action. The amendments to all claims herein, notably new Claims 28-31 find clear support throughout the present application and drawings. For example, Claims 30 and 31 find explicit support at page 3, lines 13-17 and page 6, lines 12-17 of the specification while Claims 28 and 29 find support at page 6, lines 15-18 and page 2, lines 1-24 of the specification.

Accordingly, the only outstanding issue is the prior art rejection of the claims.

All pending Claims 1-10, 16, 17 and 21-27 have been rejected under 35 U.S.C. §103 as being obvious over JP7-9149 to Kawamoto et al in view of U.S. Pat. No. 6,388,233 to Aberg et al in paragraph 14 of the Office Action. An English translation of Kawamoto et al has been provided by the Patent and Trademark Office.

Independent Claims 1, 3 and 16 have been amended to define over Kawamoto et al and Aberg et al and as presented for discussion during the telephone interview. More specifically, neither Kawamoto et al nor Aberg et al teach or suggest cyclically alternating between (1) spray arc welding and (2) short pulsing welding. Kawamoto et al and Aberg et al fail to teach or suggest the claimed invention for the following reasons.

As previously pointed out and described in the background portion of the present application, the present invention improves welding application by both spray arc/short arc welding and pulsed welding. Both procedures suffer individual disadvantages, especially when welding vertical V-joints. The claimed invention provides excellent results when welding vertical V-joints, with it now being possible to avoid previously-required weaving motion during welding. Need for a backing bar during such welding has been eliminated. Surprisingly, the overall welding procedure is now much more simply carried out.

In particular, it is now possible to weld thicker material, i.e., material of up to 10 mm. thick and both low and high alloyed steel, in addition to aluminum. There is deeper penetration into the V-joint when welding the same, together with faster running time. Furthermore, it is possible to switch between different heat and power levels in versatile manner during V-joint welding depending upon dimensions encountered.

In this regard, attention is respectfully called to the accompanying Declaration under 37 C.F.R. §1.132 executed by Henrik Wärnberg, patent engineer at ESAB AB (the assignee of the above-identified application) and an expert in the field of welding technology. Mr. Wärnberg describes the advantages attained by the claimed invention in paragraphs 2 and 3 of his Declaration as set forth *supra*. In paragraph 4 of his Declaration, Mr. Wärnberg states Kawamoto et al are limited to welding galvanized steel, i.e., zinc coated steel, and only directed to improving such welding of galvanized steel. There is no mention of spray arc welding in Kawamoto et al.

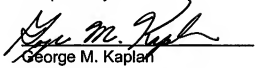
The welding according to Kawamoto et al just "boils away" the zinc coating on the steel, there being no suggestion in Kawamoto et al of controlling power levels in welding to optimize heat delivery to the welding head. Furthermore, Mr. Wärnberg states in paragraph 5 of his Declaration Aberg et al are just directed to dealing with unwanted short-circuiting occurring during pulse welding. Therefore, Mr. Wärnberg concludes in paragraph 5 of his Declaration even when considering both Kawamoto et al and Aberg et al in combination, Mr. Wärnberg, one skilled in the art, would not be lead to practicing the claimed invention to achieve the concomitant advantages.

The remaining art of record has not been applied against the claims and will not be commented upon further at this time.

Accordingly, in view of the forgoing amendment, accompanying remarks, telephone interview and enclosed Declaration under 37 C.F.R. §1.132, it is respectfully submitted all claims pending herein are in condition for allowance. Please contact the undersigned attorney should there be any questions.

Early favorable action is earnestly solicited.

Respectfully submitted,



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